

REMARKS

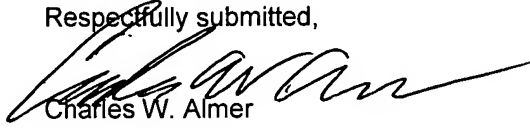
Claims 1 – 39 are pending in this application. Claims 33 – 39 have been withdrawn from consideration and claim 2 has been cancelled. Applicant hereby affirms the provisional election of claims made during the telephone conversation of 6/25/2003.

Claim 1 was rejected as anticipated under 35 U.S.C. 102(b) by U.S. Patent No. 6,194,788, issued to Gilleo. Gilleo discloses a flip chip having solder bumps and integrated flux and underfill. Claim 1 has been amended to disclose an encapsulant containing a phenol-containing compound and an imidazole-anhydride adduct. Neither of these materials is disclosed in Gilleo. As anticipation under 35 U.S.C. 102 requires identity of invention, in view of the differences between Gilleo and the present invention it is respectfully submitted that claim 1 is patentable under 35 U.S.C. 102(b) over Gilleo.

Claims 2 – 31 were rejected as unpatentable under 35 U.S.C. 103(a) over Gilleo in view of JP 62-081416A, issued to Kobayashi. Claim 2 has been cancelled. It is respectfully submitted that one skilled in the art would not be led to the use of an imidazole-anhydride adduct via the combination of Gilleo and Kobayashi. The use of an anhydride as a curing agent is not conventionally known in the art of B-stageable underfill encapsulants. The reason for this is that the use of anhydride generally does not delay curing for a period of time sufficiently long to allow the solder to flux. Consequently, one skilled in the art would be motivated to incorporate a curing agent with different cure properties and thus be led away from the use of an anhydride as a curing agent. Further, the adduct is required in order to allow for the use of anhydride and the imidazole. It would not be sufficient to merely add the two as separate ingredients to the composition. The adduct provides a higher curing temperature than that of the individual ingredients. This is shown in Example 4 of the present application wherein the imidazole is provided alone and produces a curing temperature that is too low. Kobayashi does not address any of the difficulties in using an anhydride in such a formulation and merely states that 1,8-diazabicyclo(5.4.0)-7-undecene trimellitate "(or anhydride)" may be utilized as a curing promoting agent. Accordingly, it is respectfully submitted that one skilled in the art would not be led to the present invention via Gilleo in view of Kobayashi, thus it is respectfully submitted that claims 3 – 31 are patentable under 35 U.S.C. 103(a) over Gilleo in view of Kobayashi. It is believed that the Examiner's specific rejections to the dependent claims will be rendered moot via the amendments to and description of the distinction between claim 1 and the cited references.

In view of the foregoing, it is respectfully submitted that the present application is in condition for allowance. If there are any issues that the Examiner wishes to discuss, he is invited to contact the undersigned attorney at the telephone number set forth below.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Charles W. Almer', written over the typed name.

Charles W. Almer

Reg. No. 36,731

Tel. No. 908 707-3738

National Starch and Chemical Company
10 Finderne Avenue
Bridgewater, NJ 08807
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